## **EUROPEAN PATENT OFFICE**

## Patent Abstracts of Japan

PUBLICATION NUMBER

04184160

**PUBLICATION DATE** 

01-07-92

APPLICATION DATE

19-11-90

APPLICATION NUMBER

02311473

APPLICANT: RIKA KOGYO KK;

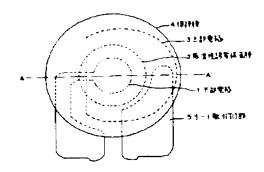
INVENTOR: TAKAHASHI KIYOSHI;

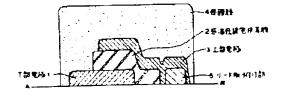
INT.CL.

G01N 27/12

TITLE

: HUMIDITY SENSITIVE ELEMENT





ABSTRACT :

PURPOSE: To improve the water resistivity and temperature characteristic, and increase the responsive speed by convering an element body with a water- resistant protective film.

CONSTITUTION: A lower part electrode 1 formed on an insulative substrate, humidity sensitive dielectric thin film 2 formed on the electrode 1, and an upper part electrode 3 consisting of a humidity-permeable metal-covered film formed on the thin film 2 are provided. The whole surface of the element body is covered by a water-resistant protective film in which the product of the optical film thickness of the thin film 2 and the optical film thickness of the protective film is  $100 \mu m^2$  or less and the film thickness of the protective film satisfies a range of 1µm or more. Further, the water-resistant protective film is preferably made of silicone group polymer, e.g. silicone rubber.

COPYRIGHT: (C)1992,JPO&Japio